

**EXACT ENGLISH LANGUAGE
TRANSLATION OF THE
APPLICATION AS
ORIGINALLY FILED
WITH ABSTRACT**

Abstract

The invention relates to an exhaust gas regenerator (VG) comprising an exhaust gas catalyst (KAT). According to the invention, the hot-operated catalyst (KAT) is located adjacent to a diffusion membrane (MEM) that is resistant to high temperatures and is, in turn, adjacent to a regenerated gas collector (RS) that is maintained at a lower pressure (p_r) than the respectively prevailing inner pressure (p_k) in the catalyst, and the regenerated gas (RG) produced is supplied as a complementary fuel to a combustion device (COMB) mounted upstream of the generator (1) and/or is used otherwise in a chemico-energetic manner.